Paper No. 26

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte BARRY S. ROSS, ROBERT L. REYNOLDS,
GLEN A. VANBEBBER and DANIEL A. WHITE

Appeal No. 94-2025[1]
Application 07/784,338

ON BRIEF

Before McCANDLISH, LYDDANE and MEISTER, Administrative Patent Judges.

LYDDANE, Administrative Patent Judge.

This is a decision on an appeal from the final rejection of claims 1 through 16, which are all of the claims in the application.

The subject matter on appeal is directed to a blanket for protecting a spacecraft from passive intermodulation in a space environment and to a method for protecting a spacecraft from passive intermodulation in a space environment. Claims 1, 6, and 15 are exemplary of the invention and a copy thereof, as they appear in the appendix to the appellants' brief, has been appended to this decision.

[1]Application for patent filed October 29, 1991.

The references of record relied upon by the examiner in a rejection of the claims under 35 USC 103 are:

Fellas	4,489,906	Dec. 25, 1984
Kurland et al (Kurland)	4,755,231	Jul. 5, 1988

Additionally, this panel of the Board has relied upon appellants' admission on page 4 of the specification as originally filed, that "Black KAPTON" in a variety of resistivities and thicknesses is commercially available from the DuPont Corporation, in making a new rejection of appealed claims 1 through 5 under 35 USC 102(b).

Claims 1 through 16 stand rejected under 35 USC 103 as being unpatentable over Fellas in view of Kurland.

Claims 1 through 3 and 5 stand rejected under 35 USC 103 as being unpatentable over Kurland.

Rather than reiterate the examiner's statement of the above rejection and the conflicting viewpoints advanced by the examiner and the appellants, we refer to pages 3 through 7 of the examiner's answer, to pages 5 through 7 of the appellants' brief and to the appellants' reply brief for the full exposition thereof.

OPINION

Our evaluation of the patentability issues raised in this appeal has included a careful assessment of appellants' specification and claims, the applied prior art, and the respective positions advanced by the appellants and the examiner. With respect to the

applied references, we have considered all of the disclosure of each reference for what it would have fairly taught one of ordinary skill in the art. See In re Boe, 355 F.2d 961, 148 USPQ 507 (CCPA 1966). Additionally, we have taken into account not only the specific teachings of each reference, but also the inferences which one skilled in the art would have reasonably been expected to draw from the disclosure. See In re Preda, 401 F.2d 825, 159 USPQ 342 (CCPA 1968). On the basis of the knowledge and level of skill in the art at the time of appellants' invention, as reflected by the applied references, it is our conclusion that the examiner's rejection of claims 1 through 3 and 5 under 35 USC 103 based on the patent to Kurland and the rejection of claim 15 under 35 USC 103 based on the patents to Fellas and Kurland are well founded, but that the rejection of claims 1 through 14 and 16 under 35 USC 103 based on the combined teachings of the patents to Fellas and Kurland is not. Additionally, we have made new rejections of claims 1 through 5 under 35 USC 102(b) and of claims 4 and 15 under 35 USC 103. Our reasoning for this determination follows.

Having carefully considered the disclosures of the patents to Fellas and Kurland in light of the positions expressed by both the examiner and the appellants, we find nothing in the teachings of either Fellas or Kurland to suggest the combination thereof in the manner proposed by the examiner in the rejection of the claims on appeal. The initial burden of establishing a basis for denying

patentability to a claimed invention rests upon the examiner. In re Piasecki, 745 F.2d 1468, 223 USPQ 785 (Fed. Cir. 1984). In establishing a prima facie case of obviousness under 35 USC 103, it is incumbent upon the examiner to provide a reason why one of ordinary skill in the art would have been led to modify a prior art reference or to combine reference teachings to arrive at the claimed invention. Ex parte Clapp, 227 USPQ 972 (BPAI 1985) To this end, the requisite motivation must stem from some teaching, suggestion or inference in the prior art as a whole or from the knowledge generally available to one of ordinary skill in the art and not from appellants' disclosure. See, for example, Uniroyal, Inc. v. Rudkin-Wiley Corp., 837 F.2d 1044, 5 USPQ2d 1434 (Fed. Cir. 1988).

Although both of the applied references disclose protective layers for use on spacecraft, and both disclose the use of KAPTON layers, in our view, neither suggests the use of Black KAPTON as disclosed in Kurland as a suitable substitute for the KAPTON disclosed in the multi-layered protective blanket of Fellas. As stated in W.L. Gore & Associates, Inc. v. Garlock, Inc., 721 F.2d 1540, 1553, 220 USPQ 303,312-313 (Fed. Cir. 1983),

> [t]o imbue one of ordinary skill in the art with knowledge of the invention in suit, when no prior art reference or references of record convey or suggest that knowledge, is to fall victim to the insidious effect of a hindsight syndrome wherein that which only the inventor taught is used against its teacher.

It is our conclusion that the only reason to combine the teachings of the applied references in the manner proposed by the examiner results from a review of appellants' disclosure and the application of impermissible hindsight. Thus, we cannot sustain the examiner's rejections of appealed claims 1 through 14 and 16 under 35 USC 103 based on the combined teachings of Fellas and Kurland for the reasons stated by the examiner.

We shall, however, sustain the examiner's rejection of claims 1 through 3 and 5 under 35 USC 103 over Kurland alone. Moreover, although we do not consider the teachings of Fellas and Kurland to be properly combinable as noted above, we are of the opinion that claims 4 and 15 are also unpatentable over Kurland alone. It is our view that the blanket and the method recited in appealed claims 1 through 5 and 15 are disclosed in the patent to Kurland except for the particular resistivity of the carbon loaded plastic sheet specified in claims 1, 4, 5 and 15. However, we note that appellants' specification discloses that the resistivities of the blanket "within the range of approximately 100 to 10,000 ohms per square are believed to be the most useful" page 4, lines 4 and 5). As our reviewing court stated in In re Woodruff, 919 F.2d 1575, 16 USPQ2d 1934 (Fed. Cir. 1990) at 16 USPQ2d 1936, 1937

> [n]or can patentability be found in the difference in carbon monoxide ranges recited in the claims. The law is replete with cases in which the difference between the claimed invention and the prior art is some range or

> other variable within the claims. [citations omitted] These cases have consistently held that in such a situation, the applicant must show that the particular range is critical, generally by showing that the claimed range achieves unexpected results relative to the prior art range. Gardner, 725 F.2d at 1349, 220 USPQ at 786 (obviousness determination affirmed because dimensional limitations in claims did not specify a device which performed and operated differently from the prior art). [citations omitted]. (emphasis in original)

The appellants have not made any such showing of criticality in the present case, and in fact, as noted above, have suggested the contrary in the specification as originally filed. Therefore, it is our conclusion that appealed claims 1 through 5 and 15 do not patentably distinguish over the blanket and method disclosed in Kurland, and we shall sustain the examiner's rejection of claims 1-3 and 5 under 35 USC 103.

Additionally, we make the following new rejections pursuant to the provisions of 37 CFR 1.196(b).

Claims 4 and 15 are rejected under 35 USC 103 as being unpatentable over Kurland for the reasons set forth above.

Claims 1 through 5 are rejected under 35 USC 102(b) as being anticipated by the sheet of Black KAPTON commercially available from DuPont Corporation, as admitted by appellants on page 4 of the specification as originally filed. The sheet of Black KAPTON admitted to be known by appellants provides blanket structure as claimed. In appealed claims 1 through 5, the recitation that the

blanket is "for protecting a spacecraft from passive intermodulation in a space environment" is merely a statement of intended use which may not be relied on to distinguish the blanket structure from the prior art. See In re Casey, 370 F.2d 576, 152 USPQ 235 (CCPA 1967) and In re Pearson, supra. We note that the preamble language of a claim can constitute a claim limitation when it gives "life and meaning" to a claim. See Corning Glass Works v. Sumitomo Electric U.S.A. Inc., 868 F.2d 1251, 9 USPQ2d 1962 (Fed. Cir. 1989). In other words, when preamble language is part of the definition of the invention, it provides a limitation. See Diversitech Corp. v. Century Steps Inc., 850 F.2d 675, 7 USPQ2d 1315 (Fed. Cir. 1988). On the other hand, as here, when the preamble states a purpose or intended use for the invention, it is not limiting. It merely indicates a possible use or the environment in which the claimed invention operates. See Loctite Corp. v. Ultraseal Ltd., 781 F.2d 861, 228 USPQ 90 (Fed. Cir. 1985).

Accordingly, the decision of the examiner rejecting claims 1 through 3 and 5 under 35 USC 103 is affirmed, but the decision rejecting claims 6 through 14 and 16 under 35 USC 103 is reversed. New rejections of claims 1 through 5 under 35 USC 102(b) and of claims 4 and 15 under 35 USC 103 have been made pursuant to 37 CFR 1.196(b).

Any request for reconsideration or modification of this decision by the Board of Patent Appeals and Interferences based upon the same record must be filed within one month from the date hereof (37 CFR 1.197).

With respect to the new rejections under 37 CFR 1.196(b), should appellants elect the alternate option under that rule to prosecute further before the Primary Examiner by way of amendment or showing of facts, or both, not previously of record, a shortened statutory period for making such response is hereby set to expire two months from the date of this decision. In the event appellants elect this alternate option, in order to preserve the right to seek review under 35 USC 141 or 145 with respect to the affirmed rejection, the effective date of the affirmance is deferred until conclusion of the prosecution before the examiner unless, as a mere incident to the limited prosecution, the affirmed rejection is overcome.

If the appellants elect prosecution before the examiner and this does not result in allowance of the application, abandonment or a second appeal, this case should be returend to us for final action on the affirmed rejection, including any timely request for reconsideration thereof.

No time period for taking any subsequent action in connection with this appeal may be extended under 37 CFR 1.136(a).

AFFIRMED

HARRISON E. McCANDLISH)
Administrative Patent Judge)
)
)
WILLIAM E. LYDDANE) BOARD OF PATENT
Administrative Patent Judge) APPEALS
) AND
) INTERFERENCES
)
JAMES M. MEISTER)
Administrative Patent Judge)
)

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APPENDIX
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1. A blanket for protecting a spacecraft from passive intermodulation in a space environment comprising a carbon loaded plastic sheet having a resistivity of between 100 and 10,000 ohms per square.

6. The blanket of Claim 1 wherein the sheet has an external side for facing the space environment and an internal side for facing the spacecraft, and further comprising a second dielectric plastic sheet substantially coextensive with the first sheet adjacent to the internal side of the first sheet.

15. A method for protecting a spacecraft exterior from passive intermodulation in a space environment comprising attaching a blanket including a carbon loaded plastic sheet to at least a portion of the spacecraft exterior, the plastic sheet having a resistivity of between 100 and 10,000 ohms per square.